# **Birch Ply**

## Birch Birch L



Metsä Wood Birch is a high-quality Finnish plywood product sanded on both sides. Birch plywood can be used for a wide range of applications. Metsä Wood Birch is available in various sizes: standard, L, XL and KingSize.

### **APPLICATIONS**

Metsä Wood Birch is a multipurpose panel for different uses where a strong and rigid panel is needed.

- <u>Transport industry:</u> road transport and railway transport vehicle floors and walls, LNG carriers, container floors, flight cases etc.
- <u>Building applications:</u> floor and roof structures, interior cladding, sports hall floors, scaffolding, doors and door surfaces etc.
- Other applications: packing applications, furniture, toys etc.

### **MAJOR ADVANTAGES**

- Strong and rigid
- Excellent strength-to-weight ratio
- Dimensionally stable
- · Smooth, hard and durable surface
- High quality visual surface
- Easy to machine and fasten using conventional woodworking tools and fasteners
- Weather- and boil-proof bonding
- Made of sustainable Nordic wood and PEFC (PEFC/02-31-03) certified





### **BASE PLYWOOD**

Metsä Wood Birch plywood is made of cross-bonded 1.4 mm thick birch veneers bonded with weather- and boil-resistant phenol formaldehyde adhesive.

Designed and tailor-made to serve in demanding applications, birch plywood can be ordered with special oriented veneer structures to provide even higher strength and stiffness properties.

### **SURFACE PROPERTIES**

Metsä Wood Birch plywood panels are sanded on both sides and their surface is smooth, hard and durable. The surface can be treated with standard paints, lacquers, varnishes and protection treatments applicable on wood products. Confirm the compatibility of surface treatment from the supplier.

The surface grades are determined by the grade of the sanded surface veneers as follows:

Birch plywood surfaces - typical properties S (II) - painting grade BB (III) - standard grade (patched) WG (IV) - reverse grade

Classification of Metsä Wood Birch surface grade meets EN 635 requirements.

### **PANEL SIZES**

WIDTH (mm)							
LENGTH (mm)	2400	2440	2500	3000	3050	3660	4110
1200*							
1220*							
1250*							
1500*							
1525*							
1870							
2020							
	1200* 1220* 1250* 1500* 1525* 1870	LENGTH (mm) 2400  1200*	LENGTH (mm) 2400 2440  1200*	LENGTH (mm)     2400     2440     2500       1200*     Image: square of the control of the contr	LENGTH (mm)     2400     2440     2500     3000       1200*     Image: Control of the c	LENGTH (mm)         2400         2440         2500         3000         3050           1200*         Image: Control of the contr	LENGTH (mm)         2400         2440         2500         3000         3050         3660           1200*         Image: Control of the control of th

<sup>\*</sup> The measurement indicates the orientation of the surface veneer grain.

Larger size scarf-jointed XL and King Size panels are also available by special order

### SIZE TOLERANCES

Measured in accordance with standard EN 324, the plywood size and squareness tolerances meet EN 315 requirements.

#### **PANEL TOLERANCES**

LENGTH / WIDTH	TOLERANCE
<1000 mm	±1mm
1 000 - 2 000 mm	± 2 mm
>2 000 mm	± 3 mm
Squareness	± 0.1 % or ±1 mm/m
Edge straightness	± 0.1 % or ±1 mm/m

### THICKNESSES, STRUCTURES AND THICKNESS TOLERANCES

The thickness tolerances fulfil the requirements of standard EN 315 and are in part more stringent than the official requirements.

### THICKNESSES, STRUCTURES AND THICKNESS TOLERANCES OF THE PANELS\*

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NOMINAL THICKNESS	NUMBER OF PLIES	THICKNESS	WEIGHT			
(mm)	(no.)	min. (mm)	max. (mm)	kg/m²		
6.5	5	6.1	6.9	4.4		
9	7	8.8	9.5	6.1		
12	9	11.5	12.5	8.2		
15	11	14.3	15.3	10.2		
18	13	17.1	18.1	12.2		
21	15	20.0	20.9	14.3		
24	17	22.9	23.7	16.3		
27	19	25.2	26.8	18.4		
30	21	28.1	29.9	20.4		
35	25	33.5	35.5	23.8		
40	29	38.8	41.2	27.2		
45	32	43.6	46.4	30.6		
50	35	48.5	51.5	34.0		

 $<sup>\</sup>ensuremath{^{*}}$  The moisture content of the product affects its dimensions

### **BONDING CLASSES**

Metsä Wood plywood panels are bonded with a weather- and boil-resistant phenol formaldehyde adhesive. The gluing meets the requirements of the standard EN 314-2 / Class 3 (exterior).

### **FORMALDEHYDE EMISSIONS**

Determined according to EN 717-1, the formaldehyde emitted by Metsä Wood Birch falls far below the Class E1 requirement of  $\leq$  0.100 ppm and fulfils also the most stringent requirements in the world ( $\leq$  0.030 ppm). The formaldehyde emission of Metsä Wood Birch is approximately 0.013 ppm.



<sup>=</sup> standard panel size

<sup>\*</sup> Average density of Metsä Wood birch plywood is 680 kg/m³ (at a relative humidity of 65%)

<sup>\*</sup> Special structures and thicknesses are available on request

<sup>\*</sup> Customised tolerances are possible but must be agreed separately

<sup>\*</sup> Birch L is available up to thickness of 30 mm



### **APPROVALS AND DESIGN PROPERTIES**

Metsä Wood Birch is CE and UKCA marked and the design properties are determined according to standard EN 13986. The design properties given in the Declaration of Performance (DoP) and in the UK Declaration of Conformity (UK DoC) are to be used for structural calculations with EN 1995 (Eurocode 5). The DoP documents can be downloaded from <a href="https://www.metsawood.com/dop">www.metsawood.com/dop</a> and the UK DoC documents can be downloaded from <a href="https://www.metsawood.com/ukdoc">www.metsawood.com/ukdoc</a>.

Birch plywood production is managed according to the principles of standard ISO 9001. The quality and the constancy of performance of the product is controlled by regular third party inspections and audits.

#### **MACHINING**

Metsä Wood Birch plywood panels can be machined according to customer specification on request.

### **PACKAGING**

Metsä Wood Birch panels are packed in moisture-resistant plastic wrapping.

### **PACKING QUANTITIES**

	NUMBER OF PANELS PER PALLET BY THICKNESS								
PANEL SIZE (mm)	6.5	9	12	15	18	21	24	27	30
1500 / 1525 x 2400 - 3660 1200 / 1220 / 1250 x 2850 - 3660	90	65	50	40	35	30	25	25	20
1500 / 1525 x 1500 - 2135 1200 / 1220 / 1250 x 1200 - 2800	140	100	75	60	50	45	40	35	30
1500 / 1525 x 3670 - 4110 1870 / 2020 x 1870 - 4110	70	50	35	30	25	20	15	15	15
1870 / 2020 x 1870 / 2020	140	100	70	60	50	40	30	30	30

### **FURTHER INFORMATION**

- Metsä Wood Birch Declaration of Performance (www.metsawood.com/dop)
- Metsä Wood Birch UK Declaration of Conformity (www.metsawood.com/ukdoc)
- Metsä Wood Birch XL Product Data Sheet
- Metsä Wood KingSize Product Data Sheet

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